## **STANFORD**



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3 October 1990

Dr. Joshua Lederberg, President Emeritus The Rockefeller University 1230 York Avenue New York, NY 10021-6399

Dear Joshua:

Thank you for your note of 28 September regarding my comment in Science on HLW disposal. Of course I'm glad to know that you agree with my feeling that HLW for the present should remain accessible in storage facilities at the earth's surface, and that current efforts to dispose of it immediately are a waste of time and money. With present institutional arrangements it seems to me more and more that any sort of permanent disposal in the near future is just impossible.

I'm afraid I don't agree with you that injection of HLW into subduction zones would be a good method of handling it. We still don't know enough about details of the operation of subduction -- waste buried in a deep-ocean trench might just as well be pushed onto an adjacent continent as carried down into the mantle. My own preference would be burial in the sediments out toward the middle of an oceanic plate, say in the Pacific north of Hawaii.

In answer to your query about Yucca Mountain, the plan is to put the waste in underground tunnels, in the unsaturated zone well above the water table. The great virtue of this site is the fact that the water table is more than 600 meters below the surface, so there is plenty of room for a repository. For disposal on land it seems to me that this is a very promising site, and I hope the state of Nevada will ultimately let DOE do the necessary exploratory work.

Thank you for the reprint of your comments on retirement and future plans in News and Notes. I'm glad to know that you are now a member of the Secretary of Energy's Advisory Board.

Sincerely,

Konrad B. Krauskopf

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